

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed June 26, 2008. Upon entry of the amendments in this response, claims 1 – 9, 12 – 18, 21, 22, 25, and 26 remain pending. In particular, Applicant amends claims 4 and 9. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **I. Specification Objections**

The Office Action objects to the Title as allegedly being “not descriptive” and suggests a new title. Applicant appreciates the suggestion made in the Office Action but submits that such a title is unduly narrow. Accordingly, Applicant attempts to accommodate and overcome this objection by amending the title, as indicated above to provide a descriptive title pursuant to MPEP §606.01, to facilitate accurate indexing, classifying, searching, *etc.*

### **II. Claim Objections**

The Office Action objects to claim 9 for allegedly including one or more formalities. Applicant amends claim 9, as indicated above, and submit that claim 9, as amended, is allowable.

### **III. Rejections Under 35 U.S.C. §112**

The Office Action indicates that claim 4 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Office Action asserts that there is insufficient antecedent basis in claim 4. Applicant amends claim 4, as indicated above and submits that claim 4, as amended, meets all the requirements of 35 U.S.C. §112.

#### IV. Rejections Under 35 U.S.C. §102

##### A. Claim 1 is Allowable Over *Shi*

The Office Action indicates that claim 1 stands rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent Number 6,326,640 ("*Shi*"). Applicant respectfully traverses this rejection on the grounds that *Shi* does not disclose, teach, or suggest all of the claimed elements. More specifically, claim 1 recites:

A transistor device having a metallic source electrode, a metallic drain electrode, a metallic gate electrode and a channel in a deposited semiconductor material, the transistor device comprising:

a first layer comprising the metallic gate electrode, a first metal portion of the metallic source electrode and a first metal portion of the metallic drain electrode;

***a second layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode***, the deposited semiconductor material and dielectric material between the semiconductor material and the metallic gate electrode; and

a third layer comprising a substrate, wherein the first, second and third layers are arranged in order such that the second layer is positioned between the first layer and the third layer.

***(Emphasis added).***

Applicant respectfully submits that claim 1 is allowable over the cited art for at least the reason that *Shi* fails to disclose, teach, or suggest a "transistor device having a metallic source electrode, a metallic drain electrode, a metallic gate electrode and a channel in a deposited semiconductor material, the transistor device comprising... ***a second layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode***, the deposited semiconductor material and dielectric material between the semiconductor material and the metallic gate electrode" as recited in claim 1. More specifically, the Office Action all but admits that *Shi* fails to disclose this element by reading the "upper half" of 75 as the first metal portion of the metallic source electrode and the "lower half" of element 75 as the second metal portion of the metallic source electrode (with

similar analysis for element 76) (OA page 5, first and second paragraphs). However, this is an incorrect inference. Referring to FIG. 7, conductive strips 75 and 76 are single piece elements and thus are part of only one layer. Consequently, an arbitrary division of these elements into an "upper half" and a "lower half" cannot be read on "**a second layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode**" as recited in claim 1. For at least this reason, claim 1 is allowable.

**B. Claim 25 is Allowable Over Shi**

The Office Action indicates that claim 25 stands rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent Number 6,326,640 ("*Shi*"). Applicant respectfully traverses this rejection on the grounds that *Shi* does not disclose, teach, or suggest all of the claimed elements. More specifically, claim 25 recites:

A transistor device having a metallic source electrode, a metallic drain electrode, a metallic gate electrode and a channel in a deposited semiconductor material, the transistor device comprising:

a first upper planar layer comprising the metallic gate electrode, a first metal portion of the metallic source electrode and a first metal portion of the metallic drain electrode;

**a second middle planar layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode**, the deposited semiconductor material and dielectric material between the semiconductor material and the metallic gate electrode; and

a third lower planar layer comprising a substrate, wherein first, second and third planar layers are arranged in order such that the second middle layer is positioned between the first upper layer and the third lower layer,

wherein the metallic source electrode, drain electrode and gate electrode comprise electro-deposited metal, the gate electrode occupies only the first upper planar layer and the channel occupies only the second middle planar layer, the metallic source electrode consists of the first metal portion of the metallic source electrode overlying the second metal portion of the metallic source electrode and the metallic drain electrode consists of the first metal portion of the metallic drain electrode overlying the second metal portion of the metallic drain electrode.

**(Emphasis added).**

Applicant respectfully submits that claim 25 is allowable over the cited art for at least the reason that *Shi* fails to disclose, teach, or suggest a “transistor device having a metallic source electrode, a metallic drain electrode, a metallic gate electrode and a channel in a deposited semiconductor material, the transistor device comprising... ***a second middle planar layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode***, the deposited semiconductor material and dielectric material between the semiconductor material and the metallic gate electrode” as recited in claim 25. More specifically, the Office Action all but admits that *Shi* fails to disclose this element by reading the “upper half” of 75 as the first metal portion of the metallic source electrode and the “lower half” of element 75 as the second metal portion of the metallic source electrode (with similar analysis for element 76) (OA page 5, first and second paragraphs). However, this is an incorrect inference. Referring to FIG. 7, conductive strips 75 and 76 are single piece elements and thus are part of only one layer. Consequently, an arbitrary division of these elements into an “upper half” and a “lower half” cannot be read on “***a second middle planar layer comprising a second metal portion of the metallic source electrode, a second metal portion of the metallic drain electrode***” as recited in claim 25. For at least this reason, claim 25 is allowable.

**C. Claims 2 – 9, and 26 are Allowable Over *Shi***

The Office Action indicates that claims 2 – 9, and 26 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent Number 6,326,640 (“*Shi*”). Applicant respectfully traverses this rejection on the grounds that *Shi* does not disclose, teach, or suggest all of the claimed elements. More specifically, dependent claims 2 – 9 and 26 are believed to be allowable for at least the reason that these claims depend from and include the elements of

allowable independent claim 1. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

**III. Rejections Under 35 U.S.C. §103 – Claim 12 is Allowable Over Shi**

The Office Action indicates that claim 12 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 6,326,640 (“*Shi*”). Applicant respectfully traverses this rejection for at least the reason that *Shi* fails to disclose, teach, or suggest all of the elements of claim 12. More specifically, dependent claim 12 is believed to be allowable for at least the reason that this claim depends from and include the elements of allowable independent claim 1. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

### **CONCLUSION**

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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